

METHOD AND APPARATUS TO QUIESCE A PORTION OF  
A SIMULTANEOUS MULTITHREADED CENTRAL PROCESSING UNIT

ABSTRACT OF THE DISCLOSURE

Execution of a program's instructions in a simultaneous multithreaded processor  
5 is halted while the program is waiting for one or more events to occur by first arming an  
event monitor upon an arm instruction, that is, identifying to the event monitor one or  
more events to be monitored, such as a modification to a value or state of an identified  
memory location or group of locations, and setting a watch flag to indicate enable the  
event monitor. Upon execution of a quiesce request instruction, the program quiesces if  
10 the watch flag is set, and a timer is started. Upon observation by the event monitor of  
an identified event, or upon expiration of the timer, the watch flag is cleared and  
execution of the program resumes.

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